

## Abstract

A process for the preparation of polyisobutene containing at least 75 mol% of terminal vinylidene groups, in which isobutene or an isobutene-containing hydrocarbon mixture is polymerized in the liquid phase in the presence of a boron trifluoride complex catalyst having the composition

$$10 \quad a(\text{BF}_3) : b(\text{Co1}) : c(\text{Co2})$$

where Co1 is at least one tertiary alcohol, Co2 is at least one compound selected from water, primary alcohols, secondary alcohols, dialkyl ethers, alkanecarboxylic acids and phenols, the ratio c:b is from 0.9 to 1.8 and the ratio (b+c):a is from 0.9 to 3.0, is described.

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